# ARTIFACT SHEET

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artifact type code (see list below) + sequential letter (A, B, C). The first					
artifact folder for an artifact type receives the letter A, the second B, etc					
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	Confidential Information Disclosure Statement or Other Documents				
	marked Proprietary, Trade Secrets, Subject to Protective Order,				
	Material Submitted under MPEP 724.02, etc.				
	Doc Code: Artifact Artifact Type Code X				
	Other description: Patent (105, 409				
	Other, description: Patent 5/15, 409  Doc Code: Artifact Type Code: Z				

# The United States America

# The Commissioner of Patents and Trademarks

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

# **United States Patent**

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Harry F. Manlech, Jr.

Commissioner of Patents and Trademarks

Mescilla Afullar



### US005105409A

# [11] Patent Number:

5,105,409

# [45] Date of Patent:

Apr. 14, 1992

# Kaku et al.

# [54] METHOD AND APPARATUS FOR OPTICAL RECORDING AND REPRODUCTION WITH TRACKING SERVO REDUCING TRACK OFFSET

United States Patent [19]

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[21] Appl. No.: 230,971

[56]

[22] Filed: Aug. 11, 1988

369/44.35; 369/44.42 [58] Field of Search .... 369/44.27, 44.29, 44.31-44.36,

369/44.39, 44.42, 105, 106

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### [57] ABSTRACT

Disclosed is an optical recording and reproducing apparaus comprising a light source directing a light spot toward a recording medium, a detection system detecting light reflected from the recording medium to derive an electrical signal from the reflected light, an information processing circuit modulating the intensity of the light spot according to writing pulses to record information on the recording medium and using the electrical signal to reproduce information from the recording medium, and a tracking servo circuit carrying out tracking servo operation on the basis of the electrical signal and including an extracting circuit connected to a source of extracting pulses having a pulse width at least equal to the writing pulse width so that writing pulse parts contained in the electrical signal are extracted during recording information, whereby a track offset occurring during information recording can be minimized, and the stability of the tracking servo system can be improved.

### 11 Claims, 4 Drawing Sheets

